



# Chemlon® 100 XH

Teknor Apex Company (Chem Polymer) - Polyamide 66

## General Information

### Product Description

Chemlon 100 XH is internally and externally lubricated for excellent feed and mold release properties.

### General

|                   |                                            |                                       |                                      |
|-------------------|--------------------------------------------|---------------------------------------|--------------------------------------|
| Material Status   | • Commercial: Active                       |                                       |                                      |
| Availability      | • Asia Pacific                             | • Europe                              | • North America                      |
| Additive          | • Heat Stabilizer                          | • Lubricant                           |                                      |
| Features          | • General Purpose<br>• Good Processability | • Good Toughness<br>• Heat Stabilized | • High Strength<br>• Lubricated      |
| Uses              | • Appliances                               | • Automotive Applications             | • Electrical/Electronic Applications |
| Appearance        | • Black                                    | • Natural Color                       |                                      |
| Forms             | • Pellets                                  |                                       |                                      |
| Processing Method | • Injection Molding                        |                                       |                                      |

## ASTM & ISO Properties <sup>1</sup>

| Physical                                                 | Nominal Value | Unit     | Test Method |
|----------------------------------------------------------|---------------|----------|-------------|
| Specific Gravity                                         | 1.14          |          | ASTM D792   |
| Mechanical                                               | Nominal Value | Unit     | Test Method |
| Tensile Strength                                         | 12000         | psi      | ASTM D638   |
| Tensile Elongation (Break)                               | 25            | %        | ASTM D638   |
| Flexural Modulus                                         | 425000        | psi      | ASTM D790   |
| Flexural Strength                                        | 16500         | psi      | ASTM D790   |
| Impact                                                   | Nominal Value | Unit     | Test Method |
| Notched Izod Impact (73°F)                               | 1.0           | ft-lb/in | ASTM D256   |
| Thermal                                                  | Nominal Value | Unit     | Test Method |
| Deflection Temperature Under Load<br>264 psi, Unannealed | 190           | °F       | ASTM D648   |
| Melting Temperature                                      | 490           | °F       |             |
| Flammability                                             | Nominal Value | Unit     | Test Method |
| Flame Rating                                             | V-2           |          | UL 94       |

## Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 150 to 180    | °F   |
| Suggested Max Moisture | 0.20          | %    |
| Rear Temperature       | 540           | °F   |
| Middle Temperature     | 520           | °F   |
| Front Temperature      | 500           | °F   |
| Nozzle Temperature     | 500           | °F   |
| Mold Temperature       | 70 to 200     | °F   |
| Injection Pressure     | 5000 to 20000 | psi  |
| Screw Speed            | 60 to 120     | rpm  |

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.